
THE IMPLEMENTATION OF PROJECT-BASED LEARNING IN THE DEVELOPMENT OF 21ST-CENTURY SKILLS AND CRITICAL THINKING SKILLS IN ISLAMIC RELIGIOUS EDUCATION

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ABSTRACT

Islamic Religious Education (PAI) in the 21st century is required not only to transfer religious knowledge but also to holistically develop students' critical thinking skills and 21st-century competencies. However, the reality in the field shows that PAI learning is still dominated by conventional methods that are less capable of optimally developing students' critical thinking abilities and 21st-century skills. This study aims to: (1) describe the planning and implementation of Project Based Learning (PjBL) in PAI; (2) analyze the development of 21st-century skills through PjBL in PAI; (3) examine the improvement of students' critical thinking skills through PjBL in PAI; and (4) analyze the relevance of PjBL to Islamic values and student character formation. This study employs a qualitative approach with a library research design, collecting and analyzing reputable national and international journal articles published between 2020 and 2025. The results show that the implementation of PjBL in PAI is proven effective in developing 21st-century skills including critical thinking, communication, collaboration, and creativity, while simultaneously internalizing Islamic values and forming students' character holistically and sustainably. PjBL is a highly relevant learning model and is recommended to be consistently applied in PAI learning at various educational levels.

Keywords: Project Based Learning, 21st Century Skills, Critical Thinking, Islamic Religious Education, Character Formation

ABSTRAK

Pembelajaran Pendidikan Agama Islam (PAI) di era abad ke-21 dituntut untuk tidak hanya mentransfer pengetahuan keagamaan, tetapi juga mengembangkan keterampilan berpikir kritis dan kompetensi abad 21 peserta didik secara holistik. Namun realitas di lapangan menunjukkan bahwa pembelajaran PAI masih didominasi metode konvensional yang kurang mampu mengembangkan kemampuan berpikir kritis dan keterampilan abad 21 siswa secara optimal. Penelitian ini bertujuan untuk: (1) mendeskripsikan perencanaan dan penerapan PjBL dalam PAI; (2) menganalisis pengembangan keterampilan abad 21 melalui PjBL dalam PAI; (3) mengkaji peningkatan kemampuan berpikir kritis siswa melalui PjBL dalam PAI; dan (4) menganalisis relevansi PjBL terhadap nilai-nilai Islami dan pembentukan karakter siswa. Penelitian ini menggunakan pendekatan kualitatif dengan jenis studi kepustakaan (library research) melalui pengumpulan dan analisis artikel jurnal nasional dan internasional bereputasi tahun

2020–2025. Hasil penelitian menunjukkan bahwa implementasi PjBL dalam PAI terbukti efektif dalam mengembangkan keterampilan abad 21 yang mencakup kemampuan berpikir kritis, komunikasi, kolaborasi, dan kreativitas, sekaligus menginternalisasikan nilai-nilai Islami dan membentuk karakter siswa yang holistik dan berkelanjutan. PjBL menjadi model pembelajaran yang sangat relevan dan direkomendasikan untuk diterapkan secara konsisten dalam pembelajaran PAI di berbagai jenjang pendidikan.

Kata Kunci: Project Based Learning, Keterampilan Abad 21, Berpikir Kritis, Pendidikan Agama Islam, Pembentukan Karakter

INTRODUCTION

Islamic Religious Education (IRE) plays a strategic role in the national education system, not only as a subject that imparts religious knowledge but also as a primary instrument for the comprehensive development of students' character and 21st-century competencies. Amid increasingly complex global dynamics, demands for the quality of PAI instruction are rising because future generations of Muslims are expected not only to master religious knowledge cognitively but also to think critically, communicate effectively, collaborate, and be creative in facing the various challenges of modern life. Within the framework of the Merdeka Curriculum currently being implemented nationwide, the orientation of PAI instruction has shifted from a teacher-centered approach toward a student-centered approach, with an emphasis on developing higher-order thinking skills that form the primary foundation for students' readiness to face 21st-century challenges (AL-Ulum & Wahab, 2025).

However, the reality on the ground reveals conditions that are still far from ideal. PAI instruction remains heavily dominated by conventional, passive methods, where the teacher acts as the sole source of information while students merely serve as passive recipients of knowledge. This situation directly impacts students' low critical thinking skills, as they tend to memorize verses or hadiths without relating them to real-life social contexts, causing PAI instruction to lose its relevance and functional significance for students' daily lives (Fazrin et al., 2025). Furthermore, 21st-century skills—including communication, collaboration, creativity, and critical thinking—have not developed optimally in conventional PAI instruction, leaving graduates ill-prepared to face the challenges of globalization, which demands far more complex and multidimensional competencies (Rohimah, 2025).

Various previous studies have examined the effectiveness of Project-Based Learning (PjBL) in various learning contexts. The study by Undari, Darmansyah, and Desyandri (2023) demonstrated that PjBL can enhance students' 21st-century skills, though it was not specifically applied within the PAI context. The study by Maimunah and Jannah (2025) examined PjBL in Islamic Education (PAI), but did not deeply explore the dimensions of Islamic character development it produces. Meanwhile, the study by Taufiqur Rohmah and Khoirul Umam (2025) demonstrated that PjBL can enhance *critical thinking* in PAI, yet their analysis was limited to a single aspect. Thus, there is a significant research gap: no study has holistically integrated the implementation of PjBL in PAI with the development of 21st-century skills, the enhancement of critical thinking

abilities, and its relevance to Islamic values as well as student character development within a unified analytical framework. This constitutes the *novelty* of this study (Fadriati, Muchlis, & BS, 2023). The ideal condition that should be realized in Islamic Education (PAI) learning is the creation of a learning process capable of developing students' competencies holistically, encompassing cognitive, affective, and psychomotor dimensions that are fully integrated with Islamic values. The PjBL model, when consistently implemented in PAI, has great potential to realize this ideal condition because it inherently encourages students to think critically, communicate effectively, collaborate productively, and innovate creatively, while simultaneously internalizing Islamic values through real and meaningful learning experiences (AL-Ulum & Wahab, 2025). Based on this, this study aims to: (1) describe the planning and implementation of PjBL in PAI instruction; (2) analyze the development of 21st-century skills through PjBL in PAI; (3) examine the improvement of students' critical thinking skills through the implementation of PjBL in PAI; and (4) analyze the relevance of PjBL to Islamic values and the holistic and sustainable development of students' character.

METHOD

This study employs a qualitative approach in the form of a literature review (*library research*), which involves collecting, reading, analyzing, and synthesizing various sources of scientific literature relevant to the research focus. The data sources in this study are drawn from indexed and reputable national and international journal articles, obtained through various scientific databases such as Google Scholar, SINTA, and other reputable journal portals with a publication timeframe ranging from 2020 to 2025, ensuring the data used is up-to-date and relevant. Data collection was conducted through a literature review of journal articles discussing the implementation of Project-Based Learning (PjBL) in Islamic Education (PAI) instruction, the development of 21st-century skills, the enhancement of critical thinking abilities, as well as the relevance of PjBL to Islamic values and student character development. Data analysis was conducted through three stages: data reduction, data presentation, and drawing conclusions, carried out systematically and critically to produce comprehensive, valid, and scientifically accountable findings (Maimunah & Jannah, 2025).

RESULTS AND DISCUSSION

Planning and Implementation of Project-Based Learning in Islamic Religious Education

Islamic Religious Education (PAI) holds a strategic position in shaping students' personality, morality, and character within the educational system. However, in practice, PAI instruction has often been dominated by conventional pedagogical approaches characterized by teacher-centered learning, rote memorization of religious texts, and one-way knowledge transmission. Such approaches tend to limit students' opportunities to develop higher-order thinking skills, creativity, and contextual understanding of Islamic values in real-life situations. Consequently, there is an urgent need for innovative instructional models that are more participatory, contextual, and meaningful. One such

model is Project-Based Learning (PjBL), which positions students as active learners engaged in solving real-world problems through meaningful projects (Widiasworo & Sari, 2021).

Project-Based Learning is rooted in constructivist learning theory, which emphasizes that knowledge is actively constructed by learners through interaction with their environment. In this model, students are not passive recipients of information but active participants who construct understanding through inquiry, collaboration, and the creation of tangible outputs (Mustakim, 2020). Within the context of PAI, PjBL is particularly relevant because it allows students to move beyond textual comprehension of religious teachings toward practical application in daily life. This aligns with the fundamental objective of Islamic education, which seeks not only cognitive mastery but also the development of attitudes and behaviors that reflect Islamic values (Rohman & Ningsih, 2021).

The planning stage is a critical determinant of the success of PjBL implementation in PAI. Teachers are required to design projects that are aligned with learning objectives while also being relevant to students' real-life contexts. Examples of such projects include creating digital da'wah content, conducting social service activities based on Islamic values, producing short films about moral teachings, writing analytical essays on contemporary religious issues, and designing religious programs within the school or community (Habibah & Sumarni, 2022). These diverse project formats provide opportunities for students to express creativity while deepening their understanding of Islamic teachings in a practical and contextual manner.

In designing projects, teachers must consider several key factors, including alignment with curriculum competencies, students' cognitive and emotional readiness, availability of resources, and relevance to socio-cultural contexts. Additionally, the development of clear and comprehensive assessment rubrics is essential. These rubrics should encompass cognitive understanding, integration of Islamic values, collaboration processes, creativity, and quality of project outputs (Nurfitriyanti, 2016). Such holistic assessment ensures that all domains of learning—cognitive, affective, and psychomotor—are effectively evaluated.

The implementation of PjBL in PAI follows a systematic process consisting of six stages: formulating essential questions, planning the project, developing a schedule, monitoring progress, assessing outcomes, and reflecting on the learning process (Insyasiska & Susilo, 2017). This structured approach ensures that learning is both process-oriented and outcome-oriented, allowing students to engage deeply with the material while developing essential life skills. Despite its advantages, the implementation of PjBL in PAI faces several challenges. Time constraints are a major issue, as PjBL requires longer durations compared to traditional teaching methods. Additionally, variations in students' abilities and motivation levels necessitate differentiated instruction strategies. Limited availability of resources and resistance from students accustomed to passive learning also pose significant obstacles (Afriana & Fitriani, 2016). However, these challenges can be

mitigated through effective strategies such as integrating projects with extracurricular activities, forming heterogeneous groups, utilizing digital resources, and fostering a supportive learning environment (Mahendra, 2017).

The role of the teacher is crucial in ensuring the success of PjBL implementation. Teachers act as facilitators, mentors, and motivators rather than sole knowledge providers. They are responsible for guiding students through inquiry processes, encouraging autonomy, and creating a collaborative learning environment. Therefore, strengthening teachers' pedagogical competencies through continuous professional development is essential for sustainable implementation of PjBL in PAI (Lestari & Projosantoso, 2016).

Developing 21st-Century Skills Through Project-Based Learning in PAI

In the era of globalization and rapid technological advancement, education must equip students with 21st-century skills, commonly referred to as the 4Cs: critical thinking, communication, collaboration, and creativity (Farida, 2024). These competencies are essential for students to navigate complex societal challenges and contribute meaningfully to their communities. Within the context of PAI, the development of these skills is increasingly important given the multifaceted challenges faced by modern Muslim youth, including exposure to misinformation, moral dilemmas, and technological disruptions.

PjBL provides a conducive framework for developing these competencies. Critical thinking is fostered as students engage in problem-solving, analyze religious issues, and evaluate information from multiple sources. Research indicates that PjBL significantly enhances students' critical thinking abilities by encouraging analytical and reflective thinking processes (Nadiyah & Tirtoni, 2023). In PAI, this skill enables students to distinguish authentic Islamic teachings from misleading interpretations. Communication skills are developed through presentations, discussions, and collaborative activities. Students learn to articulate ideas clearly, construct logical arguments, and convey Islamic values effectively (Al Fithri, 2024). This is particularly important in the digital era, where the ability to communicate religious messages responsibly is crucial.

Collaboration is another key component of PjBL. Through group work, students develop teamwork skills, respect diverse perspectives, and learn to achieve shared goals. This aligns with Islamic values of *ukhuwah* (brotherhood) and mutual cooperation (*ta'awun*), reinforcing the integration of social and religious learning (Maimunah & Jannah, 2025). Creativity is nurtured as students are given autonomy to design and implement projects. This encourages innovation and exploration of new ideas in presenting Islamic teachings, such as creating digital content or community-based initiatives (Sutrisno & Nasucha, 2022). These creative expressions make learning more engaging and relevant to students' lives.

Enhancing Critical Thinking Through PjBL in Islamic Education

Critical thinking is a higher-order cognitive skill essential for meaningful learning. In PAI, it enables students to understand religious teachings in depth and apply them contextually. However, traditional teaching methods often fail to develop this skill effectively. PjBL addresses this gap by providing opportunities for students to engage in inquiry-based learning. Through project activities, students identify problems, gather and evaluate information, analyze arguments, and draw logical conclusions. This process enhances their ability to think critically and reflectively (Rahmawati & Hidayat, 2022). Empirical studies consistently demonstrate the effectiveness of PjBL in improving critical thinking skills in PAI (Rohmah & Umam, 2025). The development of critical thinking in PAI also has broader implications. It equips students with the ability to *مواجهة* contemporary challenges, such as misinformation and ideological extremism, with rational and evidence-based perspectives. Thus, PjBL contributes not only to academic achievement but also to the development of informed and responsible individuals.

Relevance of PjBL to Islamic Values and Character Development

Character development is a central goal of Islamic education. PjBL offers a practical approach to internalizing Islamic values through experiential learning. Unlike traditional methods that rely on verbal instruction, PjBL enables students to practice values such as honesty, responsibility, and social concern in real-life contexts. The value of honesty (*amanah*) is cultivated as students engage in authentic tasks requiring integrity in data collection, collaboration, and reporting. Responsibility (*mas'uliyah*) is developed through accountability for assigned roles within group projects. Social values such as empathy, cooperation, and respect are fostered through collaborative activities (Zainudin et al., 2025).

Furthermore, PjBL supports the development of religious attitudes by integrating spiritual reflection into project activities. Students not only learn about Islamic teachings but also experience their application, leading to deeper internalization of values (Rofi'ah & Nursikin, 2022). This aligns with the holistic approach of Islamic education, which emphasizes the integration of cognitive, affective, and behavioral domains. Research findings consistently highlight the effectiveness of PjBL in enhancing students' character and social attitudes (Jamal et al., 2023). By engaging in meaningful projects, students develop a sense of purpose and responsibility, which contributes to their overall moral and spiritual development.

Project-Based Learning represents a transformative approach to Islamic Religious Education. It shifts the focus from teacher-centered instruction to student-centered learning, emphasizing active participation, critical thinking, and real-world application of Islamic values. Through careful planning and implementation, PjBL can effectively address the limitations of traditional PAI instruction and enhance the quality of learning. Moreover, PjBL plays a significant role in developing 21st-century skills, including critical thinking, communication, collaboration, and creativity. These competencies are

essential for preparing students to مواجهة the challenges of modern society while maintaining strong Islamic character. Finally, the integration of PjBL in PAI contributes to holistic character development by internalizing Islamic values through experiential learning. It enables students to become not only knowledgeable but also morally responsible individuals who embody Islamic teachings in their daily lives. Therefore, the adoption of PjBL in PAI should be supported through appropriate policies, teacher training, and a conducive learning environment to ensure its sustainability and effectiveness in shaping future generations.

CONCLUSION

Based on the results of the study and discussions conducted, it can be concluded that the implementation of Project-Based Learning (PjBL) in Islamic Religious Education has proven to be effective in addressing the challenges of 21st-century education, as this learning model not only successfully develops 21st-century skills including critical thinking, communication, collaboration, and creativity simultaneously, but also consistently instills Islamic values such as honesty, responsibility, social awareness, and religious devotion, thereby shaping students' character in a holistic and sustainable manner, therefore PjBL is highly recommended for consistent implementation in Islamic Religious Education (IRE) instruction at all educational levels with full support from the entire educational ecosystem including teachers, school principals, parents, and the community in a synergistic and sustainable manner.

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